

ABSTRACT**ANALYSIS OF BIOLOGICAL SAMPLES.**

The invention provides a method of analysing a biological sample of interest by use of:

- i) a probe library which comprises cDNA (or a derivative thereof) representative of a pattern of multiple gene expression in the biological sample of interest; and
- ii) a plurality of individual reference samples (preferably provided as an array on a substrate) each of which is a library comprised of cDNA (or a derivative thereof) representative of a pattern of gene expression in reference biological samples from which the reference samples have been derived.

The method is effected by treating individual reference samples with the probe library under hybridising conditions. The relative degree of hybridisation of the probe library to the reference samples is then determined, thereby providing an indication of the degree of similarity between gene expression in the biological sample of interest and gene expression in the individual reference biological samples. The greater the level of hybridisation between the probe library and reference samples the greater the degree of similarity in the patterns of gene expression in the samples from which they are derived.